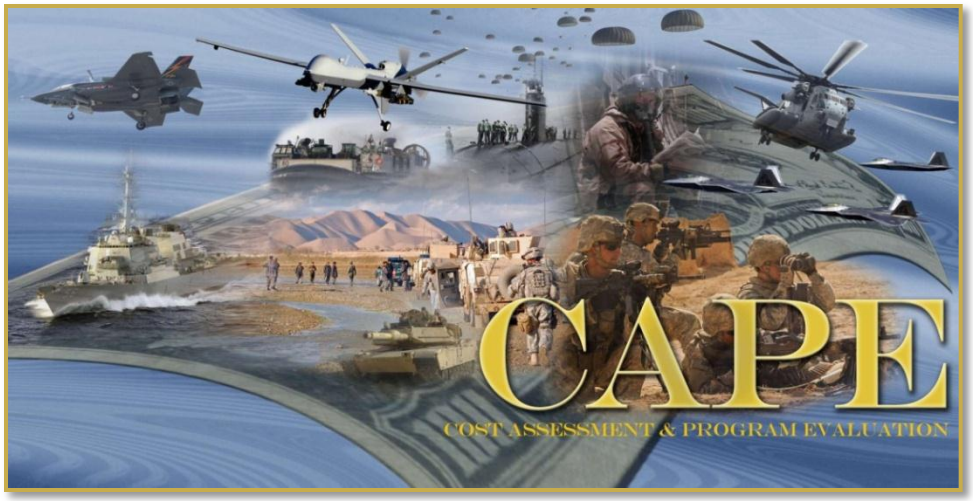
XML Overview and Conversion Instructions



July 1, 2014

XML Overview

- The following slides provide an overview of the transition to XML and step-by-step instructions to illustrate how files can be converted to XML:
  - Overview of the XML Requirement
  - DCARC-Approved XML Schemas
  - cPet Desktop Conversion
  - cPet Web Conversion

What is XML?

- A language used between IT/data systems
  - Not for humans
  - Open data tagging standard/syntax for data exchange
  - Like HTML (tagging standard for content in Web browser)

- Key XML Components
  - XML schema: Agreed to “grammar” of language
  - XML file: data package encoded to a schema
  - Secure data transmission method
  - Tools (e.g., a writer and a reader)

Why Use XML?

- Improve efficiency and reliability of data exchange
  - Old School
    - Send: Extract, prepare, print, snail-mail or fax
    - Receive: manual check and retype
  - Not So Old School
    - Send: Extract, prepare Excel/PDF, digital sign, secure transfer
    - Receive: semi-automated check, reformat, OCR
  - New School
    - Send: Extract, prepare XML, digital sign, secure transfer
    - Receive: automated check, import to database, review / analyze

DCARC XML Requirement

OFFICE OF THE SECRETARY OF DEFENSE
1800 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-1800

COST ASSESSMENT AND PROGRAM EVALUATION

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: Contractor Cost Data Reports (CCDRs) XML file Required on Future Submissions

The Defense Cost and Resource Center (DCARC) is migrating CCDR submissions from Microsoft Excel files to Extensible Markup Language (XML) files to facilitate storage of CCDR data in a structure that will streamline government CCDR data exploitation. XML data submission will reduce inefficiencies associated with redundant government efforts of manually extracting CCDR data out of Microsoft Excel files. In addition, this will reduce the amount of time required by industry to participate in the CCDR submission and validation process.

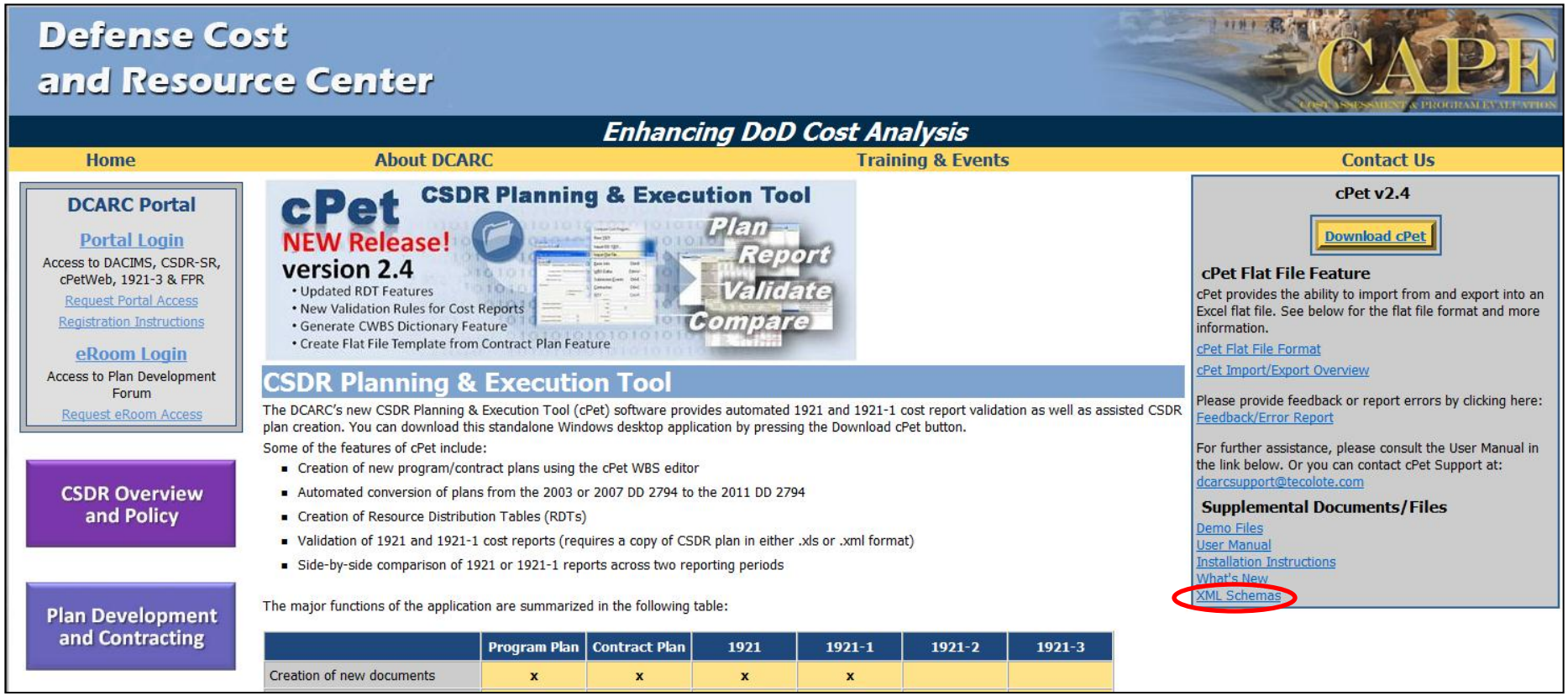
Effective July 1, 2014, all contractors, direct reporting subcontractors, and other entities reporting under the May 2011Data Item Descriptions (DI-FNCL-81565C, DI-FNCL-81566C, DI-FNCL-81567C), are required to submit CCDRs as stand-alone Excel-compatible files and as DCARC approved Extensible Markup Language (XML) files to the DCARC's secure Web site using the CSDR Submit-Review System. The DIDs already require the two formats. The DCARC is now enforcing the requirement for the XML file. The XML files can be generated automatically from the Excel-compatible files (or vice versa) with DCARC's cPet software tool. All validations starting July 1, 2014 will be conducted on the XML files. The validations will cover both content and format.

The DCARC provides cPet to organizations participating in the CCDR submission and validation process. This application, along with CCDR XML schemas, are available for download from the DCARC's website. DCARC office staff will answer questions and train your organization on how to use cPet to convert CCDR Microsoft Excel files to DCARC approved XML files (or vice versa) as requested.

To facilitate the DCARC migration to XML data submission, organizations submitting under prior versions of the May 2011 DIDs are asked to comply with this memorandum and submit CCDR XML files. The cPet application is able to handle CCDR forms dating back to 2007 DID versions. Supporting XML schemas dating back to 2007 are also available for download on the DCARC Web site.

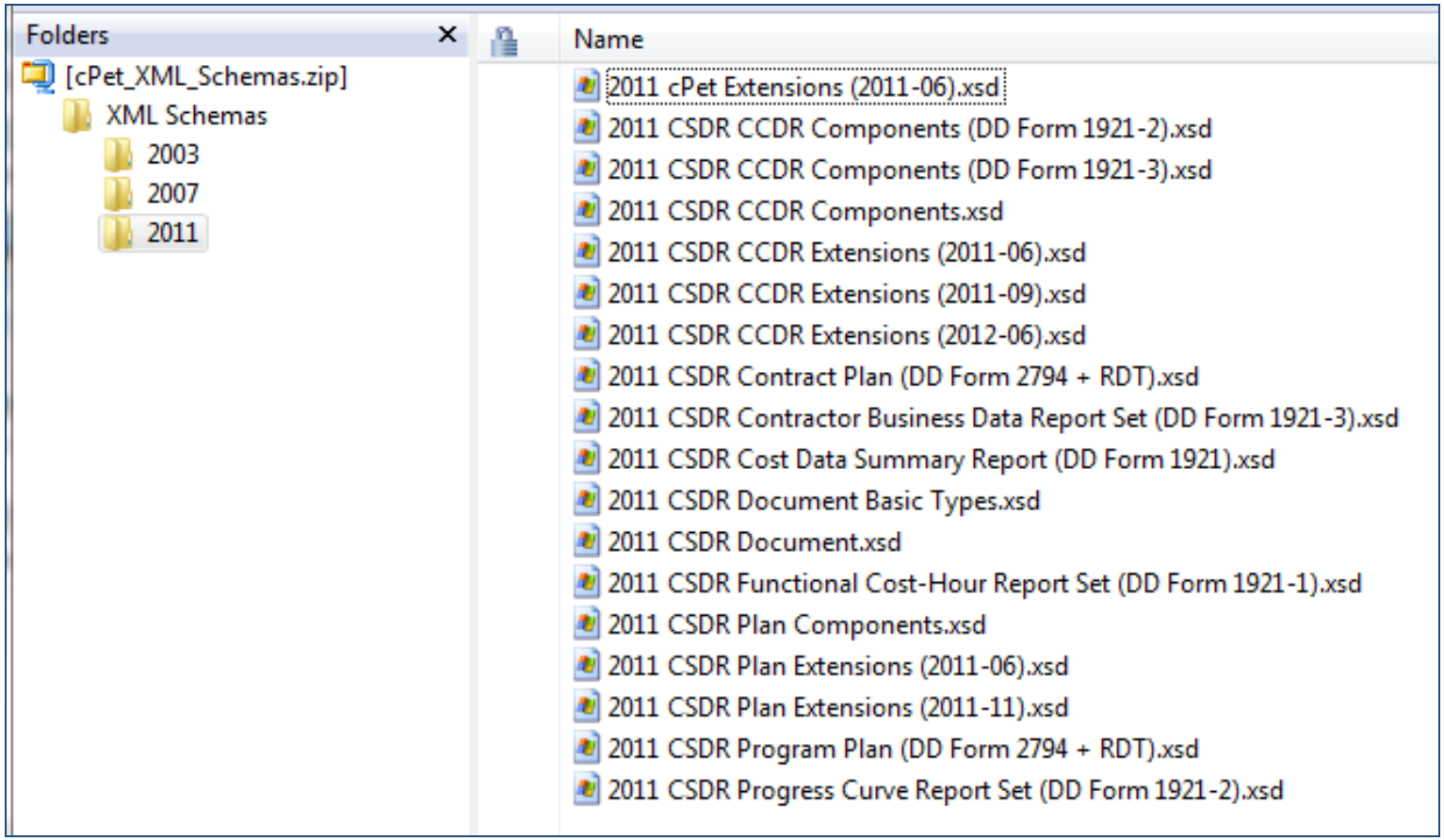
- Using Existing CCDR Schemas from cPet
  - Continue submitting "formatted" CCDRs in Excel as supplemental files
  - Continue submitting to the CSDR Submit-Review website

DCARC-Approved Schemas



- Available on the DCARC public site with cPet

Current Schemas



- Current family of schema CCDR files

Implementation

- Contractors who have the requirement to submit DD Forms 1921, 1921-1, and 1921-2 reports have the following options:
  - Write their own software to format XML files according to the published, DCARC-approved XML schemas
  - Use cPet Desktop to help generate DCARC-approved XML files from Excel files
  - Use cPet Web to help generate DCARC-approved XML files from Excel files

cPet Overview

- Key cPet Functions
  - Build & Edit CSDR Plans and RDT
  - Build, Edit, & Pre-validate CCDR Formats
  - Import and create Excel CCDR forms/templates
  - Import CCDR data from Excel “flat file”

- cPet native file format is XML!

You're Already Doing It

COST DATA SUMMARY REPORT

Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Executive Services Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

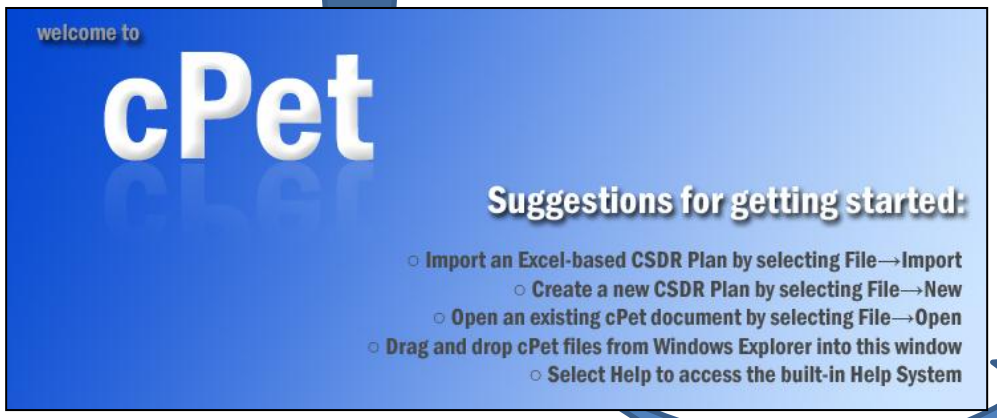
1. PROGRAM	2. PRIME MISSION PRODUCT	3. CONTRACTOR TYPE (X one)	4. NAME/ADDRESS (Include ZIP Code)	5. APPROVED PLAN NUMBER
a. MDAP: cPet Demonstration Space System (CDSS)	Demo PMP	X PRIME / ASSOCIATE	Demo Corporation, 456 Test Blvd, New York, NY, 55555	X-08-Y-C1
b. PHASE: Development		DIRECT-REPORTING SUBCONTRACTOR		

6. CUSTOMER (DIRECT-REPORTING SUBCONTRACTOR USE ONLY)	7. CONTRACT	8. CONTRACT PRI	9. CONTRACT	10. TYPE ACTION	
	FFP	$3,219,200.0	N/A	a. CONTRACT NO.: A99XYZ-08-B-1234	c. SOLICITATION NO.:
				b. LATEST MODIFICATION:	d. NAME: Demo

11. PERIOD OF PERFORMANCE	12. APPROPRIATION	13. REPORT CYCLE	14. SUBMISSION NUMBER	15. RESUBMISSION NU	16. REPORT AS OF (YYYYMMDD)
a. START DATE (YYYYMMDD): 20080513	RDT&E	INITIAL			
b. END DATE (YYYYMMDD): 20100131	X PROCUREMENT	X INTERIM	1	0	20081031
	O&M	FINAL			

17. NAME (Last, First, Middle Initial)	18. DEPARTMENT	19. TELEPHONE NUMBER (Include Area Code)	20. EMAIL ADDRESS	21. DATE PREPARED (YYYYMMDD)
Tester, Fred A	Business Operations	555-555-5555	cPetUser@demo.local	20081201

WBS ELEMENT CODE	WBS REPORTING ELEMENTS	NUMBER OF ITEMS	COSTS INCURRED TO DATE			NUMBER OF UNITS AT COMPLETION	COSTS INCURRED AT COMPLETION		
			NONRECURRING	RECURRING	TOTAL		NONRECURRING	RECURRING	TOTAL
A	B	C	D	E	F	G	H	I	J
1.0	Space System		$419,000.0	$43,200.0	$468,200.0	1	$2,819,000.0	$140,700.0	$2,959,700.0
1.1	SEIT/PM and Other Common Elements		$25,000.0	$25,000.0	$50,000.0	1	$125,000.0	$29,000.0	$154,000.0
1.2	Space Vehicle (1...n as required)		$229,000.0	$13,200.0	$242,200.0	1	$1,329,000.0	$57,7	
1.2.1	SEIT/PM and Other Common Elements		$24,000.0	$5,000.0	$29,000.0	1	$124,000.0	$5	
1.2.2	Spacecraft Bus		$22,000.0	$2,500.0	$24,500.0	1	$222,000.0	$10,	
1.2.2.1	Integration, Assembly, Test and Checkout		$12,000.0	$2,000.0	$14,000.0	1	$112,000.0	$6,	
1.2.2.2	Telemetry, Tracking, and Command Subsystem		$10,000.0	$500.0	$10,500.0	1	$110,000.0	$4,	
1.2.3	Communication / Payload		$24,000.0	$0.0	$24,000.0	1	$424,000.0	$16,	




```
<?xml version="1.0" encoding="utf-8"?>
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    <latestModification></latestModification>
    <solicitationNumber></solicitationNumber>
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    ction>
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```
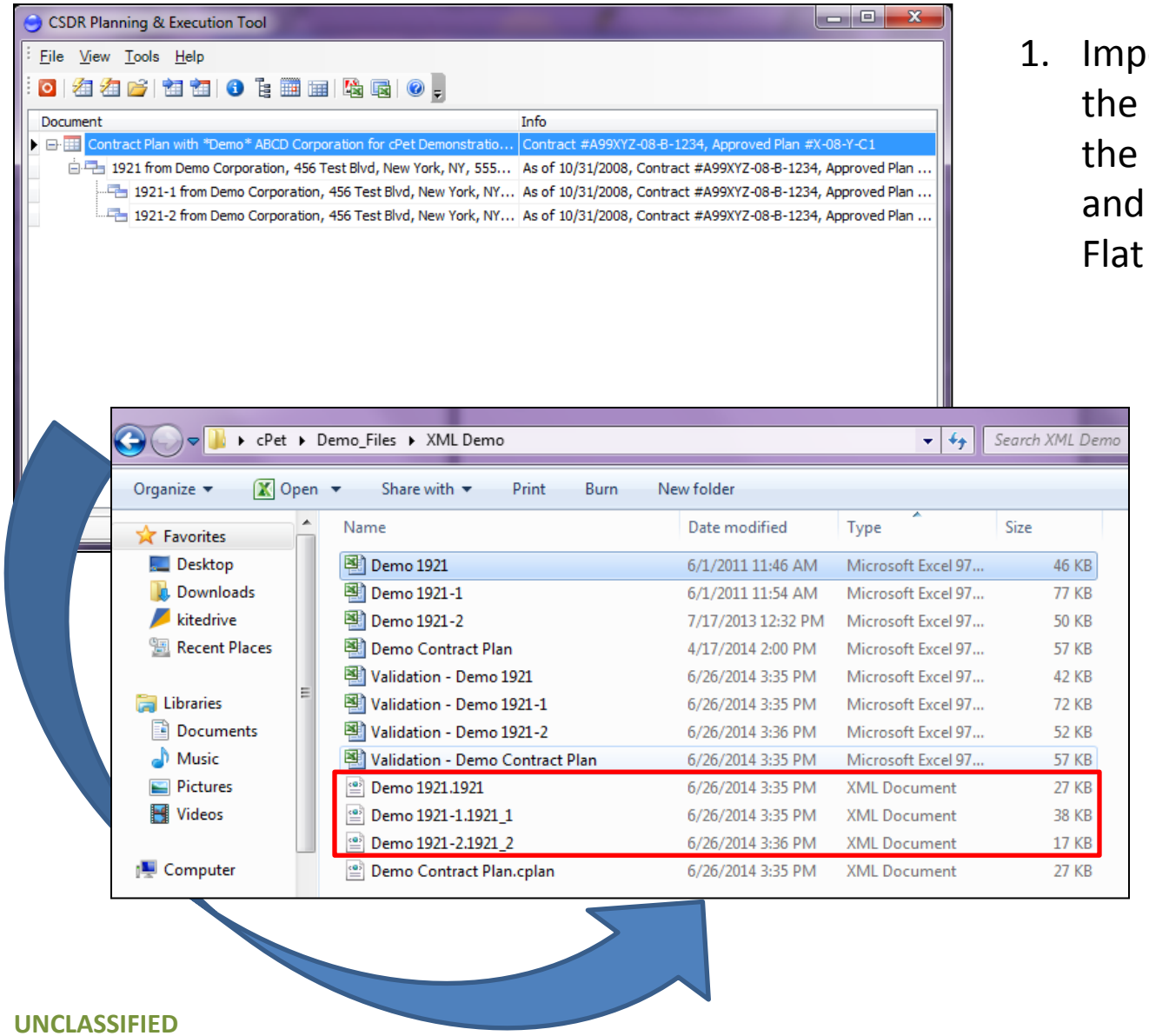

cPet defines XML standard for CCDR data

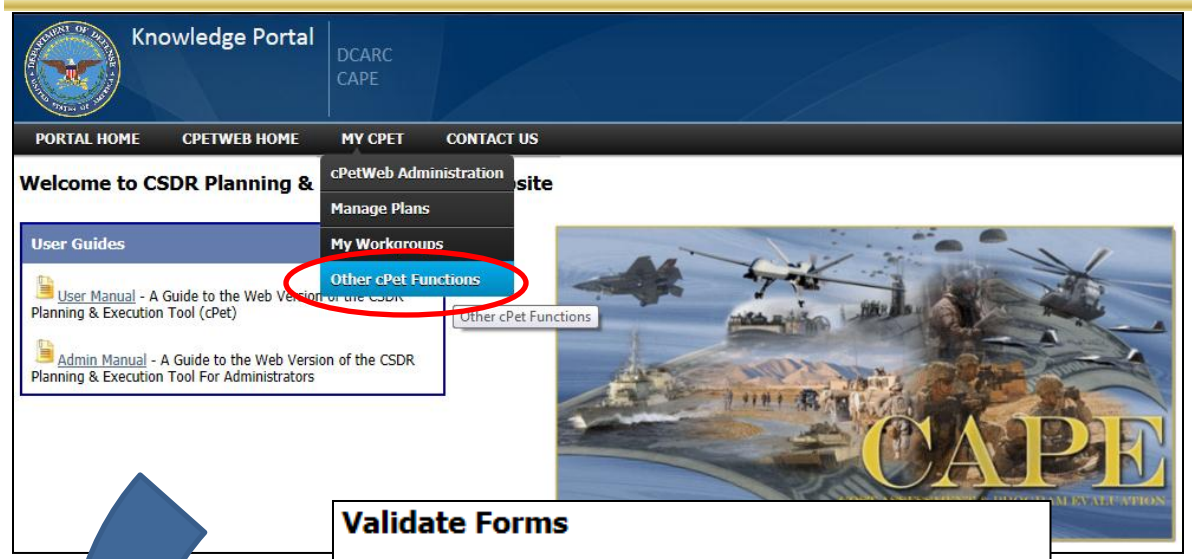
cPet Desktop Conversion



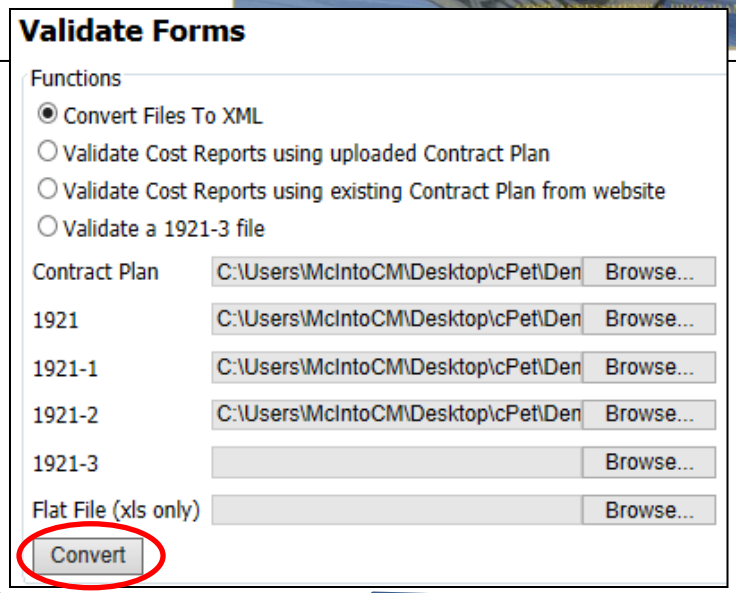
1. Import Excel version of the Contract Plan, then the Excel 1921, 1921-1, and 1921-2, or Excel Flat File.

2. cPet automatically creates XML versions of the original Excel files in their source folder directory.

cPet Web Conversion

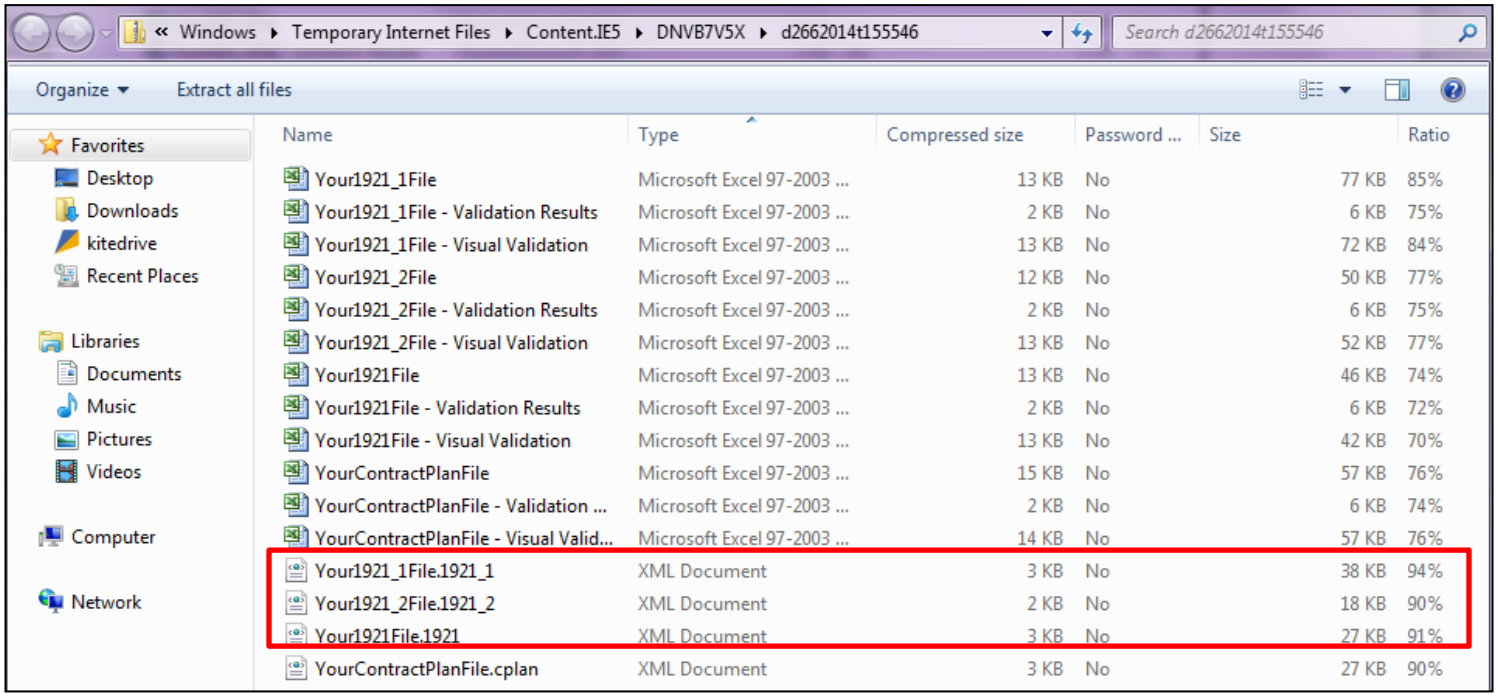


1. Navigate to cPet Web, “MY CPET”, and “Other cPet Functions”.



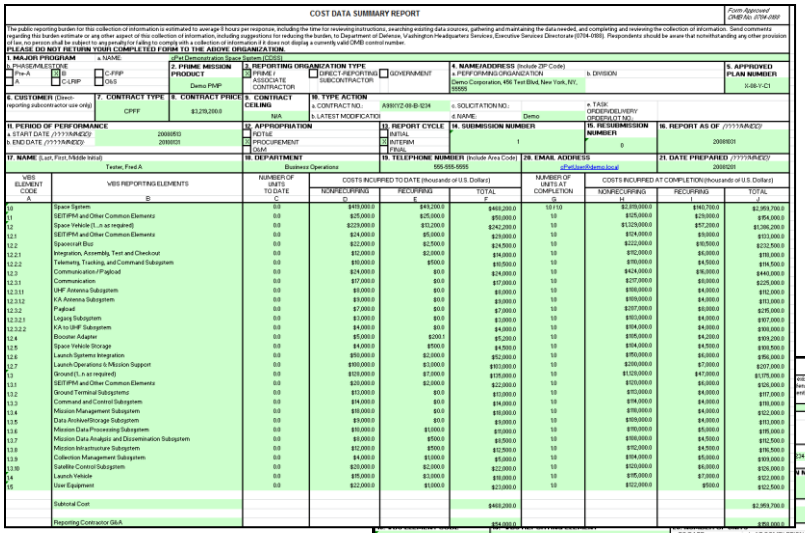
2. Browse and select the Excel Contract Plan, 1921, 1921-1, and 1921-2 reports. Then click “Convert”.

cPet Web Conversion, cont.



3. You will be prompted to “Open” a folder containing the original Excel files, as well as the converted XML files.

Visual Validation Files


COST DATA SUMMARY REPORT

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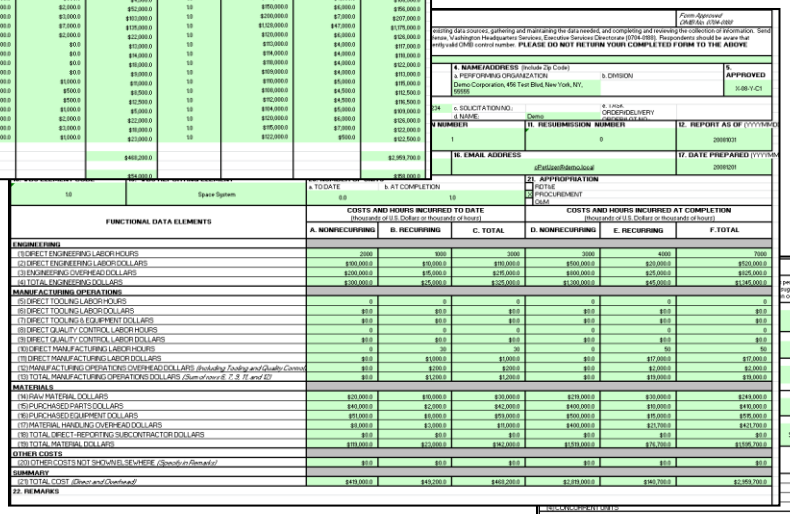
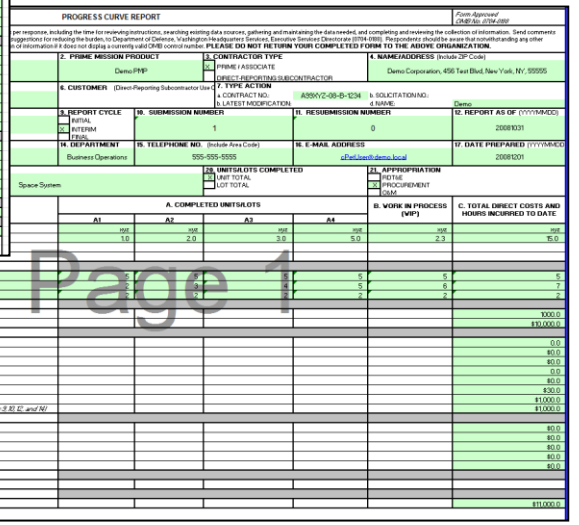
cPet desktop and cPet Web create Excel "Visual Validation" files in the source folder containing the original files.

Cells highlighted in GREEN verify that the Excel data was transferred correctly to XML, and the data will be readable in XML format.


FUNCTIONAL DATA ELEMENTS

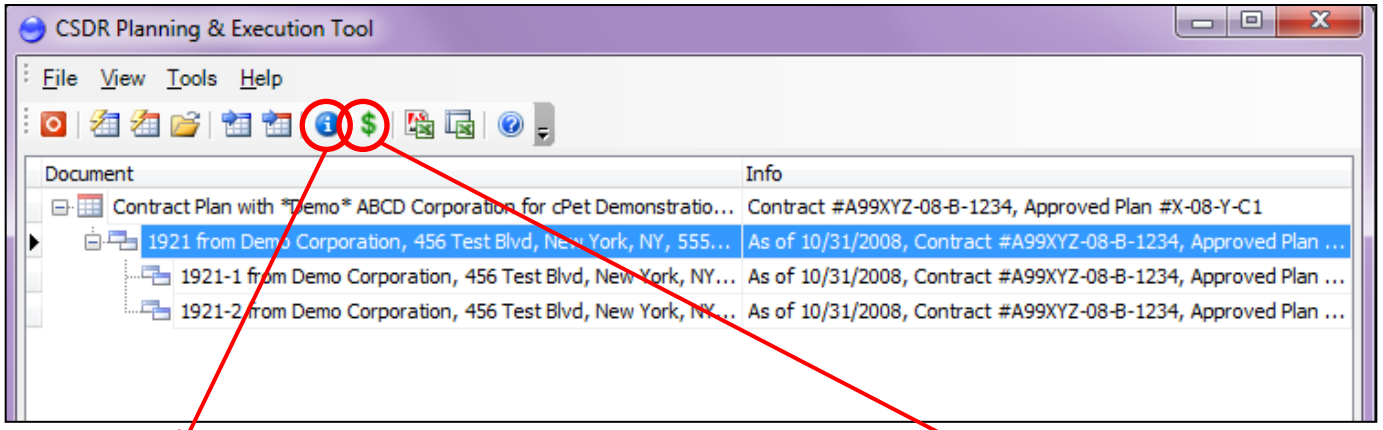

PROGRESS CURVE REPORT

Page 1

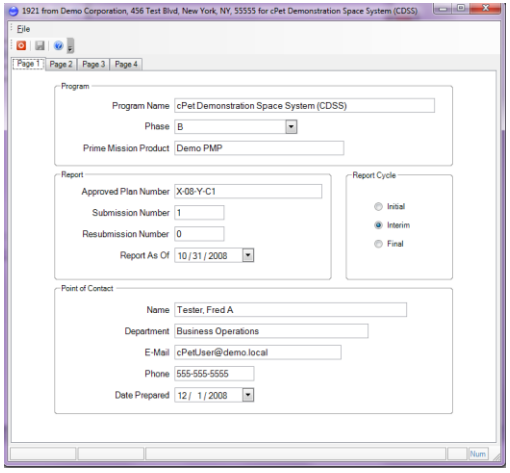
★ Only the first 1921-1 and 1921-2 report will have the header information highlighted in GREEN.

Troubleshooting

If the “Visual Validation” files contain cells that are not highlighted in GREEN, the files can be corrected within cPet Desktop:



Edit and Save Header Information



Edit and Save Cost Data